

Abstract of the bachelor thesis

Title: Introduction to Linear Mixed Models

Author: Vojtěch Šároch

Department: Department of Probability and Mathematical Statistics, MFF UK

Supervisor: doc. Mgr. Michal Kulich Ph.D.

Abstract: The thesis describes general procedures of estimation and hypothesis testing for linear statistical models. The models compare groups of observation due to dependent variable. Analysis of variance and linear mixed models are commonly used in the major science like pharmacology, biochemistry, economy and others. The thesis is appropriate for general public, because no advanced knowledge of probability and statistics are required. Particular methods are introduced gently and contain some practical examples for easier understanding of theory.

Keywords: Analysis of variance (ANOVA), fixed and random effect, linear mixed model